

WHAT IS CLAIMED IS:

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1. An electronic purse system having a double-structured purse comprising:

5 a portable type of card-formed carrier body comprising a first rewritable and non-volatile memory in turn having a first area in which a first deposited amount is stored and a second area in which a second deposited amount is stored, and an I/O terminal for accessing information stored in said first and second non-volatile memories respectively; when accessing
10 said first area, ciphered information received from said I/O terminal is de-ciphered, access is permitted if a code number included in the de-ciphered information satisfies a prespecified relation, and when accessing said second area, access to said second area is permitted if an identification
15 number indicating a type of accessible transaction apparatus;

a withdrawing machine for transferring all or a portion of a deposited amount to the first area of the memory in said card-formed carrier body, which ciphers at least either one of identification information for the apparatus and a code number
20 inputted by the card holder and transfers the ciphered information or number to said card-formed carrier body;

an input unit for inputting a code number and a amount of money to be transferred from said first area to said second area in said card-formed carrier body;

25 a transfer unit for supplying the code number, amount of

money to be transferred, and identification information inputted by said input unit to said card-formed carrier body; and

5 a device in the user's side for transmitting an amount of money used and the apparatus information to use a deposited amount stored in the second area of said card-formed carrier body; wherein said card-formed carrier body updates said first area, when transfer is instructed by said transfer unit and said individual's authorization number is accepted, by subtracting
10 a specified amount of money from the deposited amount stored in said first area, and also writes the specified amount of money in said second area, and allows, when an amount of money to be used is instructed from said device in the user's side and at the same time access to said second area is permitted according
15 to said identification information, use of the instructed amount of money with said device in the user's side by subtracting said amount of money to be used.

2. An electronic purse system having a double-structured
20 purse according to claim 1; wherein said card-formed carrier body has a program making said second area allow only the withdrawal processing stored in said second non-volatile memory.

3. An electronic purse system having a double-structured purse according to claim 1; wherein said card-formed carrier body has further a third area in said first non-volatile memory with identification information for a device in the user's side and a code number each allowing access to said third area registered in said third area, and a program for allowing addition or subtraction in said third area when identification information and a code number corresponding to information registered from said device in the user's side are inputted is stored in said second non-volatile memory.

4. An electronic purse system having a double-structured purse according to claim 3; wherein said card-formed carrier body stores in said third area identification information indicating said device in the user's side subjected to addition and an amount of added money as historical information.

5. An electronic purse system having a double-structured purse according to claim 2; wherein said card-formed carrier body skips, when said device in the user's side demands payment without specifying any area in said first non-volatile memory, the processing for de-ciphering the transferred information from said device in the user's side, and allows transaction for subtracting information on the specified amount of money from said second deposited amount.

6. An IC card applicable to an electronic purse system having a double-structured purse comprising:

a memory in which a first purse with a first amount of money stored therein, a second purse with a second amount of money stored therein, a payment processing program and cipher program are stored;

processor for executing said payment processing program
and cipher program;

communicating means for executing communications with external devices.

wherein according to said payment processing program,
said processor takes a steps of;

distinguishing said external device communicating between first type of transaction using only said second purse being allowed and second type of transaction using both of said first and said second purse being allowed;

executing payment processing program with ciphering at least a part of communication data for said external device being allowed to proceed said second type of transaction during the payment transaction; and

executing payment processing program without ciphering communication data for said external device being allowed to proceed said first type of the transaction.

7. An IC card applicable to an electronic purse system having double-structured purse according to claim 6, further comprising:

said memory storing key information in a read protection area protected to read from said external device for said cipher program which is commonly embodied in the authorized external devices for the electric money transaction; and

said cipher program ciphering the transaction data using said key information stored said memory.

8. An IC card applicable to an electronic purse system having a double-structured purse comprising:

a memory in which a first purse with a first amount of money stored therein, a second purse with a second amount of money stored therein, and a payment processing program are stored;

a processor for executing payment processing according to the payment processing program stored in said memory;

a communicating unit for executing communications with external devices; wherein said payment program executes payment processing according to the second amount of money stored in said second purse when a payment command is received from an external payment demanding device without any purse being specified, and executes the payment processing to said external device according to the amount of money stored in said first

purse when a payment command based on specification of said first purse is received.

9. An IC card applicable to an electronic purse system having
5 a double-structured purse comprising:

a memory in which a first purse with a first amount of money stored therein, a second purse with a second amount of money stored therein, a payment processing program, and an ciphering/de-ciphering program are stored;

10 a processor for executing payment processing according to the payment processing program stored in said memory;

a communicating unit for executing communications with external devices; and

15 an interface for managing interface with external transaction devices; wherein said payment program executes the payment processing according to the second amount of money stored in said second purse when a payment command not based on specification of the first purse is received via said interface from an external device, and communicates with the
20 external device using said ciphering and de-ciphering program and executes the payment processing to said external device according to the amount of money stored in said first purse when a payment command based on specification of said first purse is received.

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12. An IC card applicable to an IC card transaction system,
said card having a first purse and a second purse and used for
transaction making use of the double-structured purse
consisting of said first purse and second purse with the
5 transaction apparatus; wherein, when a code number is received
from the transaction apparatus, the processing for authorizing
the individual is executed with said received code number and
amounts of money to be stored in said first and second purses
respectively are outputted to said transaction apparatus, and
10 on the other hand, when a code number is not received from said
transaction apparatus, an amount of money for said second purse
is outputted to said transaction apparatus.